

## Engineering Specification

Job Name \_\_\_\_\_

Contractor \_\_\_\_\_

Job Location \_\_\_\_\_

Approval \_\_\_\_\_

Engineer \_\_\_\_\_

Contractor's P.O. No. \_\_\_\_\_

Approval \_\_\_\_\_

Representative \_\_\_\_\_

# Series 1L, 1XL, 10L and 100XL Temperature and Pressure Relief Valves

A.S.M.E Rated\*, CSA Listed. Self-closing T&P Relief Valves for Water Heaters up to 105,000 BTU/Hr.

The combined 2 in 1 T&P relief valve provides the least expensive and proven means for protection against both excessive temperature and pressure emergency conditions.

Provides fully automatic temperature and pressure relief protection for hot water storage tanks and heaters up to 105,000 BTU/HR. Series 10L furnished with test lever and short thermostat for installation directly in tank tapping. Series 100XL furnished with test lever and extension thermostat for installation in the hot water outlet line or directly in the tank tapping. Temperature sensing element must be immersed in the water within the top 6" (152mm) of the tank. Male inlet and female outlet. Temperature relief 210°F (99°C). Standard settings 75, 100, 125, 150psi (5.3, 7.0, 8.8, 10.6 bar).

## Features

- Series 1L, 1XL Size ½"  
10L, 100XL Size ¾"
- A.S.M.E. Rated\*, CSA Listed
- Features a unique thermostat with special thermo-bonded coating
- 1L & 1XL – Bronze body  
10L & 100XL – Brass body
- Stainless steel spring
- Thermostat is accurate and proven. Exclusively designed and manufactured by Watts

## Options

- For tanks and heaters with extra thick insulation, send for literature ES-SL100XL/L100XL/LL100XL/LLL100XL
- Series 100XL-8 with 8" (200mm) extension thermostat
- Series 1L, 1XL Size ½": For both temperature and pressure relief protection. Series 1L has short thermostat and test lever. Series 1XL has extension thermostat with thermo-bonded coating. Also available with 8" (200mm) extension thermostat

\* Series 1L and 1XL Valves are not A.S.M.E. Listed or Rated.



## Specifications

### T&P valves

Each water heater and hot water storage tank shall be equipped with a CSA and A.S.M.E. Rated\* automatic temperature and pressure relief valve to protect the heater from excessive pressure and temperature. The device shall be ANSI Z21.22 certified. The BTU discharge capacity of the device shall be in excess of the BTU input rating of the heater. Watts Series 1L, 1XL, 10L or 100XL.

### NOTICE

Maximum system operating pressure must not exceed 75% of valve set pressure.

### WARNING

**Following installation, The valve lever MUST be operated AT LEAST ONCE A YEAR to ensure that the water-ways are clear.** Certain naturally occurring mineral deposits may adhere to the valve, rendering it inoperative. When manually operating the lever, water will discharge and precautions must be taken to avoid contact with hot water and to avoid water damage. **BEFORE operating lever,** check to see that a discharge line is connected to this valve directing the flow of hot water from the valve to a proper place of disposal otherwise personal injury may result. If no water flows, valve is inoperative. **TURN OFF THE WATER HEATER AND CALL A PLUMBER IMMEDIATELY.**

This device is designed for emergency safety relief and shall not be used as an operating control.

### NOTICE

Inquire with governing authorities for local installation requirements

### NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

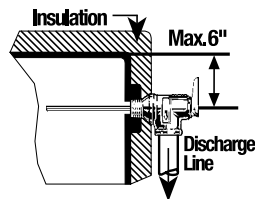
Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.

## Series 1L, 1XL, 10L and 100XL

### Direct Side Tapping

#### For External Flue Heaters

Use extra length extension thermostat to extend into water storage tank.



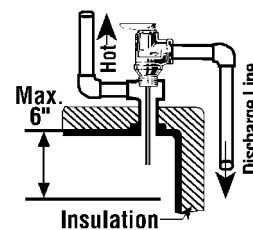
#### For Internal Flue Heaters

Use short or standard length thermostat. Vertical discharge line must be installed with its direction downward.

### Alternate

#### Only when the tappings are not provided

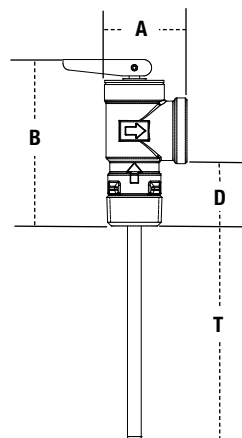
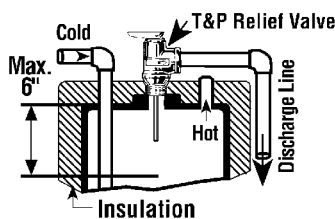
Use standard or extra length extension thermostat.



### Direct Top Tapping

#### For Heaters

Use standard or extra length extension thermostat.



## Dimensions – Weights

MODEL	SIZE	DIMENSIONS								WEIGHT		CSA Temp. Steam Rating BTU/hr.
		A			B			D		T		
	in.	in.	mm	in.	mm	in.	mm	in.	mm	oz.	gm	
1L2 M7	1/2	1 3/4	43	3 1/2	89	7/8	22	2	50	10	284	15,000
1XL-4 M7	1/2	1 3/4	43	3 1/2	89	7/8	22	4	100	12	340	15,000
1XL-8 M7	1/2	1 3/4	43	3 1/2	89	7/8	22	8	203	16	454	15,000
10L-2 M7	3/4	1 5/32	40	3 11/64	81	1 1/16	30	2	50	8	227	80,000
100XL-4 M7	3/4	1 5/32	40	3 11/64	81	1 1/16	30	4	100	8	227	105,000
100XL-8 M7	3/4	1 5/32	40	3 11/64	81	1 1/16	30	8	203	8	227	105,000

A = overall width of the valve

B = overall height of the valve, with lever closed, not including thermostat element length

D = length of shank, from shoulder under outlet orifice overhang to inlet orifice edge

T = length of thermostat element, measured from inlet orifice edge to end of thermostat

\* 150psi set pressure

### ⚠ WARNING

**REINSPECTION OF T&P RELIEF VALVE: Temperature and Pressure Relief Valves should be reinspected AT LEAST ONCE EVERY THREE YEARS** by a licensed plumbing contractor or authorized inspection agency, to insure that the product has not been affected by corrosive water conditions and to insure that the valve and discharge line have not been altered or tampered with illegally. Certain naturally occurring conditions may corrode the valve or its components over time, rendering the valve inoperative. Such conditions are not detectable unless the valve and its components are physically removed and inspected. Do not attempt to conduct this inspection on your own. Contact your plumbing contractor for a reinspection to assure continuing safety. **FAILURE TO REINSPECT THIS VALVE AS DIRECTED COULD RESULT IN UNSAFE TEMPERATURE OR PRESSURE BUILD-UP WHICH CAN RESULT IN SERIOUS INJURY OR DEATH AND/OR SEVERE PROPERTY DAMAGE.**

### NOTICE

A relief valve functions in an emergency by discharging water. Therefore, it is essential that a discharge line be piped from the valve in order to carry the overflow to a safe place of disposal. The discharge line must be the same size as the valve outlet and must pitch downward from the valve and terminate at least 6" (152mm) above the floor drain where any discharge will be clearly visible. For 100DT discharge line consult your Watts agent.



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